

Toward Learning Organization

Online University: Individual and organizational learning

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Background

Knowledge is growing exponentially. In several areas the life of knowledge is now measured in months and years. Gonzalez (2004) pronounces the challenges of hastily diminishing knowledge life:

"One of the most persuasive factors is the shrinking half-life of knowledge". The "half-life of knowledge" is the time span from when knowledge is gained to when it becomes obsolete. To combat the shrinking half-life of knowledge, organizations have been forced to develop new methods of deploying instruction."

Organization and the individual are both learning organisms. The globally accessible information technologies (IT) have a tremendous capacity to renovate the educational process in the 21st century. MultiMedia Medical University (MMU) considers learning as a continual process, lasting for a lifetime. Learning and work related activities are no longer separate. Lately technology is changing (rewiring) our brains. Informal learning is a major feature of our learning experience. Formal education no longer encompasses the mainstream of our learning. Learning now occurs in a several ways - through communities of practice, personal networks, and through completion of work-related tasks.

Current Learning Environment

The Virtual Learning Environment (VLE) has directed to reshaping the physical boundaries of a classroom, allowing more and different types of teamwork, letting learning to be a continuous, time-and place-independent process exploiting electronic media and electronic resources. (Hamalainen et al., 1996; Scardamalia and Bereiter 1993). E-learning has become very fashionable in the last decade and now influences learners of all ages. Within MMU, students and teachers use an extensive variety of information and communication tools (ICT) to communicate, collaborate and share resources. These tools deliver anytime-anywhere learning opportunities. Currently, several tools can be easily used by authors to record and en-

code streams of audio and video and then integrate them in multimedia materials such as PowerPoint slides (Bodendorf, Schertler, & Cohen, 2005).

Organizational and individual learning

Organizational learning is about the way an organization learns and adapts. In Organizational development (OD), learning is a feature of an adaptive organization, i.e., an organization that is skilled to perceive changes in signals from its environment (both internal and external) and adjust appropriately.

Argyris (1977) describes organizational learning as the means of "detection and correction of errors." In his view organizations learn through individuals acting as vehicles for them: "The individuals' learning activities, in turn, are facilitated or inhibited by an ecological system of factors that may be called an organizational learning system." While Huber (1991) believes that four factors are related to organizational learning: knowledge acquisition, information distribution, information interpretation, and organizational memory. He states that learning does not all the time augment the learner's effectiveness. In addition, learning need not result in visible changes in behavior. Huber (1991) added that : *An entity learns if, through its processing of information, the range of its potential behaviors is changed.*

Senge (1990) describes the Learning Organization as the organization "in which you cannot not learn because learning is so insinuated into the fabric of life." Also, he defines Learning Organization as "a group of people continually enhancing their capacity to create what they want to create." The concept of Learning Organization is increasingly relevant given the increasing complexity and uncertainty of the organizational environment. As Senge (1990) remarks: "The rate at which organizations learn may become the only sustainable source of competitive advantage." The main element of the Learning Organization is in how organizations handle their managerial experiences. Learning Organizations/Managers learn from their experiences rather than being bound by their past experiences.

Individual learning is only a requirement for organizational learning. Change has become the norm rather than the exception. Continuous learning throughout one's career has become vital to stay viable in the workplace. A learning organization actively creates, captures, transfers, and mobilizes knowledge to enable it to adapt to a changing environment. Therefore, the main feature of organizational learning is the interaction that takes place among individuals.

Capturing individual learning is the initial step to making it practical to an organization. There are several means for capturing knowledge and experience, such as publications, activity reports, lessons learned, interviews, and presentations. Transferring knowledge necessitates that it be approachable to as needed. In a digital world, this involves browser-activated search engines to find what one is looking for. Knowledge needs to be presented in a way that users can recognize it, and it must suit the needs of the user to endure and be internalized.

A learning organization learns from mistakes or recognizes when old solutions no longer apply. It must adapt to a changing environment. Historically, the life-cycle of organizations typically spanned stable environments between major socio-economic changes. The rate of global-scale change, necessitates more critical learning and adaptation which lead to an organization's relevance, success, and ultimate survival. Organizational learning is a process of communication among many individuals leading to well-informed decision making. Therefore, a culture that learns and adapts as part of everyday working practices is essential. Successful firms use sharing to empower the organization and avoid controlling to empower an individual. Evidently, changing from individual to organizational learning requires a non-linear transformation. When somebody learns something, it is accessible for their direct use. In distinction organizations need to invent, capture, transfer, and mobilize knowledge before it can be employed.

What is the Role of Information Systems in the Learning Organization?

As Gary Hamel put it: "For the first time since the dawning of the industrial age, the only way to build a company that's fit for future is to build one that's fit for human beings" (The Economist, 2009, p. 84). As such, there is no learning organization in the business world that can glorify itself to be best. One of the aims of MMU is to promote learning among individuals in order to improve their performance. Driscoll (2000) defines learning as "a persisting change in human performance or performance potential...[which] must come about as a result of the learner's experience and interaction with the world." Wiley and Edwards acknowledge the importance of self-organization as a learning process: "communities self-organize in a manner similar to social insects: thousands of humans pass each other on the sidewalk and change their behavior accordingly." Self-organization on a personal level is a micro-process of the larger self-organizing knowledge constructs created within corporate or institutional environments. The capacity to form connections between sources of information, and thereby

create useful information patterns, is required to learn in our knowledge economy.

One of the strategies that MMU will be following in stimulating and encouraging the learning environment within the organization and among their students is building of a network of a learner community. Normally within the networks alterations have ripple effects on the whole. Landauer and Dumais (1997) explore the phenomenon that "people have much more knowledge than appears to be present in the information to which they have been exposed." They provide a connectivist focus in stating "the simple notion that some domains of knowledge contain vast numbers of weak inter-relations that, if properly exploited, can greatly amplify learning by a process of inference." The value of pattern recognition and connecting our own "small worlds of knowledge" are apparent in the exponential impact provided to our personal learning. Our ability to learn what we need for tomorrow is more important than what we know today. When knowledge is needed, but not known, the ability to plug into sources to meet the requirements becomes a vital skill. As knowledge continues to grow and evolve, access to what is needed is more important than what the learner currently possesses.

Toward Learning Organizations

Empowering workers within MMU is a landmark step toward becoming an adaptable learning organization that can succeed in a world of swift change. Many organizations' leaders quote change as the most common problem they face. Today's business world is distinguished by globalization, extreme competition, immediate communications, and surprise. Small events can lead to consequences that are hard or impossible to envisage. Today's best organizations leaders know that the organization has to keep pace with what is happening in the external environment.

Organizations react to external changes in several methods. Several organizations are embracing new organizational forms that comprise less hierarchy and more self-directed teams or dynamic network structures that can bring together the best combination of people and resources to remain competitive. Currently, the trend is away from vertical structures that generate distance between managers and workers towards horizontal structures focused on core work processes. A similar move is granting employees more responsibility and authority for decision making, and a stronger interest in corporate values and culture. A large number of companies are converting themselves into learning organizations, which stress equality, strong culture values, and a smooth adaptable structure designed to seize opportunities, handle crises, and stay competitive in a unpredictable environment.

In online universities the presence of a transformational leadership is important to move the university through major change. Transformational leaders are characterized by the ability to bring about change, innovation, and entrepreneurship. Transformational leaders motivate followers to not just follow them personally but to believe in the vision of corpo-

rate transformation, to recognize the need for revitalization, to sign on for the new vision, and to help institutionalize a new organizational process.

The important steps that MMU use to foster learning and growth includes:

1. Create a compelling vision, by spreading the vision throughout the organizations, to focus the organization's learning efforts so that they increase the firm's competitive advantage.

2. Mobilize commitment. For the transformation to succeed there must be a shared commitment to the new vision and mission. Leaders build a coalition to guide the transformation process and work to develop a sense of team work among the group.

3. Empower employees. Giving employees the power and knowledge to act on the vision is critical. This means getting rid of obstacles such as strict, unnecessary rules and regulations, rigid hierarchies, and policies and procedures that limit and constrain employees. People are empowered with knowledge, resources, and discretion to make things happen.

4. Institutionalize a culture of change. This is the follow through stage that makes changes stick, old and outmoded values, traditions, and mind sets are permanently replaced by values of risk taking, adaptation, learning, and knowledge sharing. A culture of change recognizes that competitive advantage is a shifting concept and that the organizations must constantly be moving forward.

E-Learning and E-commerce as an Organizational Learning System

The pedagogy of e-learning in the workplace has changed over time and is currently emerging as most effective when focused on the idea of self-directed individuals engaging in organizational learning. McElroy (2003) explains this process, "...individual learning is an important element of mutual, collective, or organizational learning (OL). But it takes more than individual learning for OL to succeed. It takes independent individual learning." This pedagogical issue of self-directed individual learning blending into organizational learning comes from the premise that adult learning is a socially - based, self-organizing, organic lifelong process, rather than an event, and, therefore, requires the integration of individual and group outcomes in terms of content acquisition, soft skill development and behavior changes (Grabove, 1997; Daley, 2000 & Piper, 2004).

When an organic dynamic of work and learning occurs for the adult, this adds greatly to the organization's performance capacity. Ziegler (2002) states, "The most effective performance environments are those with an integrated view of work, worker and workplace." Kirshner (2004) describes this change in approach to learning that business has taken by merging individual and corporate learning and urges higher education to pay attention to this pedagogical development, Higher education suffers from its stress on the individual acquisition of knowledge and skills in an academic setting, while society

and industry cry out for learning outcomes that can often be achieved in authentic collaborative contexts (Kirshner 2004).

The evolution of e-learning is occurring now at the same time that the pedagogy of organizational learning is developing as well. Thankfully, no point of conflict appears in these concurrent developments. Sorine, Walls, and Trinkleback (ibid) describe the evolution of e-learning, "The Internet revolution not only has changed the way the world views electronic commerce, or e - commerce, but also e-learning at all levels."

Effect of technology on education

Many different types of technology can be used to support and enhance learning. It is critical to understand the recipe for success, which involves the learner, the teacher, the content, and the environment in which technology is used. In MMU E-commerce and technology is used for two purposes:

1. Educational Goals and a Vision of Learning Through Technology

Rather than using technology for technology's sake, the planning team in MMU wants to ensure that particular educational objectives are achieved more efficiently, in more depth, or with more flexibility through technology. In addition the team will develop a vision of how technology can improve teaching and learning. Essential to this vision is an emphasis on meaningful, engaged learning with technology, in which students are actively involved in the learning process.

2. Professional Development

After the educational goals and vision of learning through technology have been determined, it is important to provide professional development to instructors and professors to help them choose the most appropriate technologies and instructional strategies to meet these goals. The university encourages embedded opportunities for professional learning and collaborating with colleagues (Kanaya & Light, 2005).

We believe that individual instructors, professors, like institutions as a whole, create a learning climate through formal and informal interaction with students. This climate is about how instructors and students feel about things, which naturally has positive or negative effects on students' learning.

Conclusion

Modern life is characterized by unprecedented rapid change. At the level of the individual it is clear that knowledge and skills have ever-diminishing half-lives. The knowledge and skills needed in the future may not even be known at the time a person attends school or university. Therefore universities and educational institutions cannot limit themselves to the transmission of set content, techniques, and values, since these will soon be inadequate useless or even damaging to living a full life. These educational institutions must also promote flexibility, openness for the new, the ability to adapt or to see new ways of doing things, and courage in the face of the

unexpected. The psychological definition of creativity emphasizes adaptability, so that fostering creativity can be seen as part of the preparation of students to engage in the process of life-long flexibility and adaptation rather than clinging to the already obsolescent. Finally, creativity helps people cope with the challenges of life and the resulting personal stresses and strains and is thus closely connected with mental health (Cropley, 1990). These considerations mean that the fostering of creativity in the classroom is part of educational efforts aimed at the development of individuals capable of maximizing their own self-fulfillment (Cropley, 2001).

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